



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,303	01/23/2004	Gonzalo Gaston	200209835-1	4629

22879 7590 10/19/2005

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

GOLDBERG, BRIAN J

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/762,303	Applicant(s) GASTON ET AL.	
	Examiner Brian Goldberg	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: area 40 on pages 7 and 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 16 is objected to because of the following informalities: "of either of claim 14" should be just "of claim 14". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 recites the limitation "the circumferential surface" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 7 recites the limitation "the entire width" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2861

6. Claim 12 recites the limitation "said component" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 15 recites the limitation "the contents" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 17 recites the limitations "the entire width" in line 2 of the claim, "the circumferential surface" in line 2 of the claim, and "the contents" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 22 recites the limitations "said spittoon" in line 5 of the claim and "the contents" in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, is nonstatutory functional descriptive material.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 17, 20, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaylor et al. (US 6340220).

14. Regarding claim 17, Gaylor et al. disclose “a hardcopy device comprising a rotatable drum (90 of Fig 3), an elongated spittoon region extending across substantially the entire width of the circumferential surface of said drum (area around 95 of Fig 3), and a removal device for removing the contents of said spittoon region (120 of Fig 3), said removal device being movable radially relative to said drum (col 8 ln 59-61).” The removable device 120 is moving radially relative to the drum 90.

15. Regarding claim 20, Gaylor et al. disclose “wherein said removal device (120 of Fig 3) extends substantially across the entire width of the circumferential surface of said drum (90 of Fig 3).”

16. Regarding claim 21, Gaylor et al. disclose “wherein said removal device includes a scraper blade (blade of 120 of Fig 3).”

17. Regarding claim 22, Gaylor et al. disclose “a method of operating a hardcopy device...comprising the steps of firing ink from said printhead into said spittoon (col 7 ln 14-17), rotating said drum platen to move said spittoon region adjacent to a removal device for removing the contents of said spittoon region (col 8 ln 41-43 and ln 59-61), and moving said removal device radially relative to said drum platen (col 8 ln 59-61).” The drum platen (90 of Fig 3) is rotated in the direction of arrow 97 of figure 3, moving the spittoon region (area around 95 of Fig 3) adjacent to scraper 120.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1-6, 9-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al.

20. Regarding claims 1-6, 9-14, Klausbruckner et al. disclose "a hardcopy device comprising a printhead (14 of Fig 1), a spittoon arranged to receive ink from said printhead (56 of Fig 5)...wherein said spittoon is movably mounted on said hardcopy device (col 4 ln 52-54)...wherein said spittoon is mounted on a rotatable drum (12 of Fig 6 and col 5 ln 3-5)...wherein said printhead (14 of Fig 1) is fixedly mounted on said hardcopy device adjacent to said drum (see Fig 2), and wherein a print media carrier (12, 16, 18 and col 2 ln 66 – col 3 ln 6) is provided on said drum...further comprising a scraper (54 of Fig 6) adjacent to said drum, said scraper being spaced from said printhead circumferentially around said drum (see Fig 1)...wherein said scraper is arranged to be moved radially relative to the circumferential surface of said drum (col 4 ln 61-65)...further comprising a controller, said controller controlling said printhead to eject ink into said spittoon (col 2 ln 59-65 and col 5 ln 24-27, ln 51-55)... a hardcopy device comprising means defining a print media path (12, 16, 18, 22 of Fig 2), printing means (14 of Fig 2) arranged to fire ink at a print media as it moves along said path, spittoon means for receiving waste ink from said printing means (56 of Fig 5), means for

Art Unit: 2861

producing relative movement between said printing means and said spittoon means (62, 64, 66, 68 of Fig 6)...a service station module (52 of Fig 6) for a hardcopy device, said component comprising a spittoon (56 of Fig 5)...a method of operating a hardcopy device...comprising the steps of: producing relative movement of said printhead and said spittoon to bring them into a mutually adjacent position (col 5 ln 47-54); firing ink from said printhead into said spittoon (col 5 ln 54-55)." Thus Klausbruckner et al. meet the claimed invention except a heater arranged to heat ink, or means for heating ink, received in said spittoon wherein said heater comprises an electrical resistance element or an electrical heating element.

21. Steinfield et al. teach providing "a heater arranged to heat ink (260 of Fig 3, col 6 ln 41-43 and col 3 ln 62-66)," for the purpose of drying the ink, "wherein said heater comprises an electrical resistance element (col 6 ln 41-43)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a heater comprising an electrical heating element arranged to heat ink for the purpose of drying the ink. One would have been motivated to so modify the spittoon of Klausbruckner et al. for the benefit of fixing the ink to the spittoon to prevent spilling.

22. Regarding claim 16, Klausbruckner et al. in view of Steinfield et al. disclose the claimed invention as set forth above with respect to claim 14 as well as a controller as set forth above with respect to claim 10. With the use of a controller, it is inherent that a computer program for performing the method would be run on a processing device associated with a suitable hardcopy device.

Art Unit: 2861

23. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al. as applied to claims 6 and 14 above, and further in view of Gaylor et al.

24. Regarding claim 7, Klausbruckner et al. disclose "wherein said scraper...is arranged to be moved in a reciprocating manner in a direction parallel to the circumferential surface of said drum (col 5 ln 55-58)." Thus the claimed invention is met except "wherein said scraper extends along substantially the entire width of said drum."

25. Gaylor et al. teach "wherein said scraper extends along substantially the entire width of said drum (120 of Fig 3)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a scraper that extends along the entire width of the drum. One would have been motivated to so modify the scraper of Klausbruckner et al. for the benefit of increasing the area that the scraper can scrape in one motion to improve its efficiency.

26. Regarding claim 15, Klausbruckner et al. disclose "providing relative movement of said printhead and said spittoon to bring them into non-adjacent positions (col 5 ln 27-29)." Thus the claimed invention is met except "removing the contents of said spittoon."

27. Gaylor et al. teach "removing the contents of said spittoon (120 of Fig 3 and col 8 ln 23-24)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to remove the contents of the spittoon. One would have been motivated to so modify Klausbruckner et al. for the benefit of limiting the amount of ink

Art Unit: 2861

that builds up in the spittoon by clearing the spittoon of ink to allow for more spitting of ink when necessary.

28. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al. as applied to claim 3 above, and further in view of Phillips et al. Klausbruckner et al. and Steinfield et al. disclose the claimed invention as set forth above with respect to claim 3. Thus the claimed invention is met except "wherein said printhead is movably mounted on said hardcopy device and wherein said hardcopy device includes a print media path, wherein said printhead is moveable between a first, printing, disposition in which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum."

29. Phillips et al. teach "wherein said printhead is movably mounted on said hardcopy device (Fig 4) and wherein said hardcopy device includes a print media path (40 of Fig 1), wherein said printhead is moveable between a first, printing, disposition in which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum (Fig 4 and col 6 ln 19-23)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a movably mounted printhead as described and a print media path. One would have been motivated to so modify the Klausbruckner et al. and Steinfield et al. combination for the benefit of "maintaining a printhead assembly within a relatively tight space," as stated by Phillips et al. in column 2, lines 20-21.

Art Unit: 2861

30. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylor et al. in view of Klausbruckner et al.

31. Regarding claim 18 and 19, Gaylor et al. disclose the claimed invention as set forth above with respect to claim 17. Thus the claimed invention is met except "wherein said removal device is movable parallel to the circumferential surface of said drum" and "wherein said removal device is movable in reciprocating manner parallel to the circumferential surface of said drum."

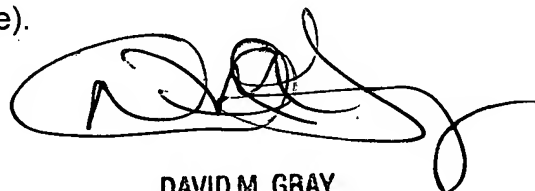
32. Klausbruckner et al. teach "wherein said removal device is movable parallel to the circumferential surface of said drum (col 5 ln 55-57)" and "wherein said removal device is movable in reciprocating manner parallel to the circumferential surface of said drum (col 5 ln 55-58)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow the removal device to be movable in reciprocating manner parallel to the surface of the drum. One would have been motivated to so modify Gaylor et al. for the benefit of providing better removal of ink in the spittoon by scraping the spittoon with an increase in the force the scraper applies to the spittoon through movement of the scraper parallel to the surface of the drum.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'D. Gray', with a large, stylized loop at the end.

DAVID M. GRAY
PRIMARY EXAMINER

BJG